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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/517,881

06/29/2005

Robin Mark Bannister

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EXAMINER

JAVANMARD, SAHAR

ART UNIT

PAPER NUMBER

1617

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/517,881	<b>Applicant(s)</b> BANNISTER ET AL.	
	<b>Examiner</b> SAHAR JAVANMARD	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Application***

This Office Action is in response to applicant's arguments filed on 1/31/2008. Claim(s) 1 and 4-11 are pending. Claims 2-3 have been cancelled. Claim(s) 1, 4, 5, 9 and 10 have been amended. Claim(s) 1 and 4-11 are examined herein.

### ***Response to Arguments***

The typographical errors in the specification and claim 10 are acknowledged and hereby withdrawn.

In view of Applicant's amendments with respect to the 112 2<sup>nd</sup> rejection of claim 9, the rejection is hereby withdrawn.

Applicant's arguments with respect to the 102(b) rejection of claims 1-5 and 7 of Mimos and McLintock have been fully considered but not found persuasive as Applicant is now arguing based on amended claims. Since Applicant has amended the claims, said rejection is hereby withdrawn.

Applicant's arguments with respect to the 103(a) rejection of claims 1, 5 and 6 and 8-10 of Mimos in view of Sridhar have been fully considered but not found persuasive. Applicant alleges that the teachings of Mimos suggest that "any reduction in nausea or vomiting is the consequence of a reduced dosage of morphine." Examiner respectfully notes that Mimos teaches that the decreased risk of nausea upon extubation may have resulted from the administration of nefopam. Although Mimos does

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not specifically employ the term “antiemetic”, it is obvious that in fact nefopam does play a role, be it additive with morphine, in decreasing nausea. Furthermore, McIntock specifically compares morphine with nefopam and morphine with a placebo in order to assess the morphine-sparing effects of nefopam (see office action mailed on 7/25/07). Indeed it is apparent that nefopam plays a role in reducing the emetic side effects. Thus the 103(a) rejection is hereby maintained for reasons of record and modified below as a result of Applicant’s amendments.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimos et al. (*Anaesthesia*, 2001) and McIntock et al. (*British Journal of Surgery*, 1988) in view of Mather et al. (*Chirality*, 2000).

Mimos discloses a post-operative study on the effects of analgesia with morphine alone (an opioid analgesic), or in combination with nefopam (abstract).

Mimoz teaches that patients underwent abdominal surgery and were monitored on their recovery based on several factors, one of which was nausea. The patients were administered morphine for the pain (page 520, column line 1-5). The reference further teaches that administration of morphine may be associated with various side-effects, including nausea (page 523, column 1, lines 14-16).

Additionally, Mimoz teaches that patients on the combination therapy had a greater sense of analgesia and a reduced sense of nausea as compared to morphine alone (page 524, column 2, lines 1-19).

Mimoz teaches that nefopam, when given in combination with morphine, acts as an anti-emetic and demonstrates a significant morphine-sparing effect (page 524, column 2, lines 10-13).

Similarly, McLintock discloses a post-operative upper abdominal study whereby patients were given morphine with nefopam and morphine with a placebo in order to assess the morphine-sparing effects of nefopam. McLintock teaches that in addition to significant analgesic effects (abstract), the frequency of side-effects (ie, nausea and vomiting) is reduced when nefopam is given in comparison to placebo (page 780, table 4).

Thus McLintock also teaches that when nefopam is given in combination with morphine, it acts as an anti-emetic agent.

Mimoz and McLintock do not specifically teach the use of the pure (+)-nefopam enantiomer.

Mather teaches that the (+)-nefopam enantiomer is 7-30 times more potent than the (-)-nefopam enantiomer.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have employed the drug nefopam to reduce the side effect of nausea post-operatively as taught by Mimosz and McLintock and used the (+)-nefopam enantiomer. The motivation to employ the (+) enantiomer, provided by Mather, teaches that the (+)-nefopam enantiomer is 7-30 times more potent than the (-)-nefopam enantiomer. Thus it is obvious to one of ordinary skill in the art to use the most potent enantiomer available in order to get the maximum effect and the least dosage possible.

Claims 4, 6, 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mimosz et al. (*Anaesthesia*, 2001) and McLintock et al. (*British Journal of Surgery*, 1988) in view of Mather (*Chirality*, 2000) as applied to claims 1, 5, and 11 above in further view of Sridhar (*Cancer*, 1988) .

Mimosz, McLintock, and Mather are discussed above.

The instant references do not teach the use of (+)-nefopam as an anti-emetic agent induced by chemotherapy. Further said references do not teach the administration of a second agent with anti-emetic properties from the classes of agents as recited in claim 9 and the specific agents in claim 10.

Although it is common knowledge that one of the common side effects of chemotherapy is emesis, Sridhar teaches that this debilitating side effect is the major

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cause of cessation of effective cancer chemotherapy in some patients. Furthermore, Sridhar teaches that nausea and vomiting can be potentially fatal toxicities in those patients with curable diseases who refuse therapy (page 1508, column I, lines 12-16).

Furthermore, Sridhar teaches that nausea and vomiting occur in a majority of patients receiving cisplatin chemotherapy despite prophylactic single agent anti-emetic therapy. The reference teaches that the combination of three potent anti-emetics, metoclopramide, diphenhydramine, droperidol, and dexamethasone was highly efficacious in preventing nausea and vomiting in moderate or high-dose cisplatin chemotherapy with little toxicity (abstract).

Sridhar teaches that it may be essential to combine anti-emetics which differ in their ability to block the emetogenicity of chemotherapeutic agents at various trigger zones to produce a synergistic or additive effect (pg 1513, column II, lines 5-9).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have employed (+)-nefopam as an anti-emetic as taught by Mimoz, McLintock and Mather and used it to treat chemotherapy as taught by Sridhar in addition to any other condition that induces emesis, including motion sickness. The motivation would have been to attenuate the commonly known side effects of chemotherapy (ie., nausea and vomiting) or other conditions, increase the quality of life, and decrease the risk of patient non-compliance.

Further, It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used (+)-nefopam as an agent with anti-emetic properties as taught in Mimoz, McLintock and Mather in combination with one or

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multiple anti-emetic agents as a combination therapy as taught in Sridhar as a method of treating emesis.

Generally, if it is known to use A, and known to use B for the same purpose, then it is obvious to use both A and B, *In re Susi*, 169 USPQ 423, 426; *In re Kerkhoven*, 205 USPQ 1069.

### ***Conclusion***

Claims 1 and 4-11 are not allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAHAR JAVANMARD whose telephone number is (571) 270-3280. The examiner can normally be reached on 8 AM-5 PM MON-FRI (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/S. J./

Examiner, Art Unit 1617

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617